

## Deposition by J.A.D. McCurdy, April 9, 1920

1

STATE OF NEW YORK: SS.: COUNTY OF NEW YORK:

JOHN A. D. McCURDY, being duly sworn, deposes as follows:

1. I reside at Toronto, Canada, and am a citizen of the Dominion of Canada. I am President and General Manager of Curtiss Aeroplanes & Motors, Limited, a corporation organized under the laws of the Dominion of Canada.
  2. I was born at Baddeck, Nova Scotia, and spent the early years of my life there. In the fall of 1901, I entered the University of Toronto for the purpose of studying engineering and graduated from that institution in the year 1906 with the degree of Mechanical Engineer.
  3. I early became interested in aviation and in the construction of a machine which would fly. Dr. Alexander Graham Bell had a home at Baddeck, Nova Scotia, where he carried on experiments with flying machines and the problems of aviation. As a boy I became interested in his work, and assisted him in his experiments. At that time he was assisted by Simon Newcomb, the eminent mathematician, and Samuel P. Langley, secretary of the Smithsonian Institution. During the course of my studies at Toronto University I used to return to Baddeck during my vacations and continued at these times to work with Mr. Bell and his associates.
  4. In the summer of 1907 there was formed at Baddeck, Nova Scotia, the Aerial Experiment Association. The members of this association were Dr. Bell, F. W. Baldwin, Lieutenant Thomas Selfridge, U. S.A., Glenn H. Curtiss and myself. The association conducted experiments during the summer and fall of 1907 at Baddeck with tetrahedral kites, with motors and with serial propellers mounted on boats. In December 1907, 2
- it was decided to move to Hammondsport, New York, where Mr. Curtiss had a factory

## Library of Congress

and to there build a glider. This move was made on December 24th. We proceeded at Hammondsport to experiment with gliders and then to build machines which would fly, the members of the association working together, although each one in turn had general charge of the design of a machine. The first machine made was called "Red Wing" and on March 12, 1908, flew for 318 feet and 11 inches. Following the construction of the "Red Wing", other machines were made, one called the "Silver Dart", being designed by me, and in this machine I made a flight on December 12, 1908. These were the first public flights which had ever been made in aeroplanes. I subsequently took the "Silver Dart" to Nova Scotia and continued flying it through the winter in 1909, making many flights and covering in all, more than one thousand miles. The flights which I made with the "Silver Dart" in Canada were the first flights which had ever been made in the British Empire. The Aerial Experiment Association continued throughout part of 1909 and as a result of our experiments, there developed the system of control through ailerons. This system of control through ailerons was so extensively used by Mr. Curtiss and was such an important feature of the Curtiss machines that it was known as the Curtiss control.

5. In 1909 the Curtiss Exhibition Company was formed and I took part in the work of this Company. For several years I gave exhibition flights in practically every state of the United States east of the Mississippi River and also in Mexico. The purpose of these exhibitions was to advertise Curtiss machines and to obtain funds with which to carry on the further development of the aeroplane. In 1909 I conducted the first wireless experiments at Sheepshead Bay Race Track in conjunction with the New York World and for the first time sent from an aeroplane a wireless message. After the first of January, 1910, I carried on these experiments in Florida and succeeded in both sending and receiving messages. In 1910, I made the first flight across water out of sight of land flying from Key West, Florida to Havana, Cuba, a distance of one hundred and ten miles. During this time I frequently carried messages and passengers for the purpose of demonstrating the uses to which the aeroplane could be put.

## Library of Congress

6. In 1912 and 1913 I flew in the vicinity of Long Island Sound and Long Island, experimenting with flying boats as well as with aeroplanes and hydroaeroplanes, and also spent a good deal of time at the Curtiss factory at Hammondsport, New York, becoming thoroughly familiar with the manufacturing which was being carried on there. In 1912, the factory had been enlarged so as to have a capacity of turning out one machine a day and a great deal of work was being done particularly in the manufacture of motors for use not only in Curtiss aeroplanes, but in other aeroplanes. The Curtiss factory at this time was producing more aeroplanes than the combined output of all the other aeroplane manufacturers in the United States.

7. In the fall of 1914, I moved to Canada, and at the request of the Government, organized a training school for aviators for service in the war. This was the only aviation school in Canada and we trained over six hundred men. I also organized as a subsidiary of the Curtiss Motor Company, the Curtiss Aeroplanes and Motors, Limited, of which I was President and General Manager, and ran the school in conjunction with this Company, the students using 4 the machines which were manufactured by us. This school was carried on for two years and during that time not a single man was hurt. By 1916 there were so many applicants for training as aviators that under the authority of Sir Robert Borden, I went to England and succeeded in arranging for the Royal Flying Corps to take over the aviation school. This was done in the fall of 1916 and I thereafter devoted my entire attention to the manufacture of aeroplanes, hydroaeroplanes, and flying boats. The factory of the Curtiss Aeroplanes and Motors, Limited, had a maximum capacity of ten machines a day of the J. N. type which was the standard training machine. Recently I have acquired the stock of the Curtiss Aeroplanes and Motors, Limited.

8. From my work with Mr. Curtiss in the invention and development of aeroplanes, hydroaeroplanes, flying boats and aeroplanemotors, from the experience which I have had in innumerable flights, and from the experience which I have had as an actual manufacturer, I am thoroughly familiar with the inventions and discoveries of Mr. Curtiss

## Library of Congress

and the progress which had been made by him and the companies in which he was interested up to March 1913, in the invention and development of practical machines for flying. Two essentials are involved in the construction of a successful flying machine — the structure of the machine and the method of control which Mr. Curtiss and his associates invented and developed before 1913 both for flights from land, and for flights from water. Before 1913 Mr. Curtiss had also invented a motor which was widely recognized as the most successful motor for use in flying machines. This motor possessed power, lightness and reliability, and in 1912, the Hammondsport factory was running to full capacity in order to manufacture sufficient 5 motors and parts to meet the demand. Many persons who were endeavoring to make aeroplanes would purchase their motors from the Curtiss Company. I know that all of the basic principles involved in the Curtiss machines were developed by 1913 and between 1913 and 1915 no real inventions were made, the only developments consisting in the improvement of certain minor devices.

9. It was also recognized as early as 1913 that there was a great future for the aeroplane not only in military service and for purposes of warfare, but in peace times. It had been our endeavor in the exhibitions which we carried on to familiarize the public with such uses. The aeroplane is of great value in peace times as a mail carrier, for the transportation of individuals; for the delivery of parcels; in connection with topography; for forestry survey, and many other important uses. While the war gave a great impetus to the manufacture of aeroplanes, during the period of the war, aeroplanes were made almost entirely for war purposes and there was no further manufacture for commercial purposes. Moreover, so many machines were manufactured during the war and were on hand when the war came to an end that there is now an oversupply which has resulted in a great curtailment of the manufacture of such flying machines as are adapted to uses in peace times. The war also had a very bad effect on the flying personnel. In order that a man should be a valuable military aviator it was necessary that he be trained to absolute fearlessness, to regardlessness of his safety, and to personal recklessness. It was inevitable as a result of such education, together with the manufacture of aeroplanes under the greatest

## Library of Congress

haste pressure, and the purposes for which aeroplanes were used in the war that many 6 accidents occurred. While almost invariably, these accidents were not due to the defects of the machines, their occurrence has caused a considerable distrust in the safety of aviation. I am convinced that there is no great danger in aviation and that this feeling will in time be overcome, but it is one of the injurious results which the war has brought to this industry. It should also be born in mind that whereas in 1913 the Curtiss Motor Company was the largest manufacturer of aircraft in the world, one result of the war was to cause many other persons to undertake the manufacture of aircraft resulting in a competition which previously did not exist.

10. I am advised that the value of the intangible assets possessed by the Curtiss Company, including the patents, inventions, goodwill and Mr. Curtiss' service, have been valued at upwards of Seven Million Dollars as of about December 31, 1915. As above stated, I know that all of the basic inventions existed as early as March, 1913, and at that time there had been developed the Curtiss aeroplane, the hydroaeroplane, the flying boat and the aeroplanemotor in substantially the same form as in December 1915. I am of the opinion that said intangible assets were worth as much in March, 1913 as in December, 1915 and value same at Seven Million Dollars.

Sworn to before me: : J. A. D. McCURDY April 9th 1920.

H. M. SOLAINI Notary Public, New York Co. (NOTARIAL SEAL) New York Co. No. 258-Registers No. 2222 Commission expires Mar. 30, 1922.